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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,503	03/08/2002	Kazuhiro Wataya	0171-0829P	1264
2292 7:	590 10/27/2003		EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747			AHMED, SHEEBA	
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
	,		1773	
			DATE MALLED LONGINGS	

Please find below and/or attached an Office communication concerning this application or proceeding.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)

6) Other:

5) Notice of Informal Patent Application (PTO-152)

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#### **DETAILED ACTION**

### Response to Amendment

1. Amendments to claims 1, 2, and 5-8 have been entered in the above-identified application. New claims 9-15 have been added. **Claims 1-15 are now pending**.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsukatani et al. (US 6,576,354 B2).

Tsukatani et al. disclose a thermally sprayed coating and a rare earth oxide used in the thermally sprayed coating (Column 1, lines 7-14). A highly corrosion-resistant coating layer is formed on the surface of a substrate wherein the method of making such a coating includes spraying particles of a rare earth oxide or rare earth-based composite oxide (Column 2, lines 63-67). The rare earth elements include yttrium and the elements having atomic numbers in the range of 57 to 71 (Column 4, lines 9-29). The particles of the rare earth oxides or composite oxides have an average particle diameter in the range of 5 to 80 microns with a dispersion in the range of 0.1 to 0.7, an

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aspect ratio not exceeding 2, a D90 not exceeding 60 microns, a bulk density not exceeding 1.6g/cm<sup>3</sup> and a cumulative pore volume of at least 0.02 cm<sup>3</sup>/g for the pores having a pore radius not exceeding 1 micron (Column 3, lines 10-30). The rare-earth oxide or composite oxide is formed by the granulation of primary particles wherein the particles are calcined at a temperature in the range of 1200 to 1800°C (Column 5, lines 66-67 and Column 6, lines 1-11). With regards to the breaking strength limitation, the Examiner takes the position that the rare-earth oxide or composite oxide particles taught by Tsukatani et al. must inherently have the claimed breaking strength given that the chemical composition and the method of making such particles as taught by Tsukatani et al. and that of the claimed invention are identical. All limitations of the claimed invention are either inherent or disclosed in the above reference.

# Response to Arguments

3. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

#### **Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (703)305-0594. The examiner can normally be reached on Mondays and Thursdays from 8am-6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703)308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5665.

Sheeba Ahmed

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October 16, 2003